

a communication lead having a first end and a second end, where the first end is communicatively coupled to the first and the second telemetry coil and the second end adapted to be communicatively coupled to a medical device programmer.

25. (Once Amended) The apparatus of claim 23, further comprising:

a flexible housing, where the flexible housing encases the first and the second telemetry coil, where the flexible housing is conformable to an irregular surface.

Please add new claim 30:

*Sub C1
B1*
30.(New) The apparatus of claim 1, where the second telemetry coil is constructed and arranged to operate at a different telemetry operational frequency than the first telemetry coil.

REMARKS

Applicant has reviewed the Office Action dated June 26, 2002, and the documents cited therewith.

Claims 1 - 3, 6, 7, 23, and 25 are amended, claims 12 and 27 are cancelled, and claim 30 has been added; as a result, claims 1 - 11, 13 - 15, 23 - 26 and 28 - 30 are now pending in this application.

Restriction/Election

The Office Action states claims 28 and 29 were withdrawn from consideration as being directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Independent claim 28 includes a second telemetry coil and independent claims 1 and 15 do not contain a second telemetry coil.

Applicant respectfully traverses holding of claims 28 and 29 as withdrawn from consideration. In response to a restriction requirement contained in the Office Action dated 9/20/01, Applicant made a provisional election without traverse of one invention for prosecution. Claims 28 and 29 do not contain subject matter from any claims reciting the other restricted inventions. Furthermore, the basis for saying that claims 28 and 29 are distinct from the

originally claimed invention does not appear reasonable because claim 12, which is a dependent claim, provides the limitation of a second coil to the apparatus in claims 1. Thus, as pointed out in the telephone conference between Applicant's attorney Charles Steffey and Examiner Oropeza on August 27, 2002, claim 1 when read with the limitation of dependent claim 12 does include a second telemetry coil. Claim 1 has been amended to recite the second telemetry coil. Applicant respectfully requests reconsideration of the holding that claims 28 and 29 are withdrawn and requests consideration of claims 28 and 29 on the merits.

Rejections Under 35 U.S.C. § 112

Claims 6 and 23-27 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which Applicant regards as the invention. In claim 6 and claim 23, "ferrite (iron-oxide) powder" was deemed indefinite.

Claims 6 and 23 have been amended to clarify the references to ferrite powder. The amendments concerning the ferrite powder are non-narrowing.

Claims 24-27 are dependent claims that add limitations to independent claim 23 which is believed to be allowable in its clarified form. Applicant respectfully requests reconsideration and allowance of claims 23-27.

Rejections Under 35 U.S.C. § 102

Claim 23 was rejected under 35 U.S.C. § 102 as being anticipated by Lee et al. (U.S. Pat. No. 5,741,315), (hereinafter "Lee") on the grounds that the magnetic element is made of ferrite, and because the communication lead is read to be the inductive coupling extending between coil (12) at a first end of the lead and the implant (26) at the second end of the lead.

For a cited reference to anticipate a claim, the cited reference must describe each and every element of the claim under consideration.

Claim 23 has been amended to recite, among other things, a first and second telemetry coil "concentrically planarly wound substantially in a common plane". This amendment is supported at page 12 lines 19 through 25 of the detailed description.

Applicant respectfully traverses the rejection insofar as the rejection is applied to amended claim 23 because not all of the elements recited in amended claim 23 are described in

Lee. For example, Applicant is unable to find in the cited portions of Lee where a first and a second telemetry coil include one or more loops of a conductive wire, and wherein the first telemetry coil and the second telemetry coil are "concentrically planarly wound substantially in a common plane", as recited in amended claim 23.

Applicant further respectfully disagrees that the communication lead called for in claim 23 may be read to be the inductive coupling extending between coil (12) at a first end of the lead and the implant (26) in Lee.

Claim 23 recites, among other things, a communication lead where the first end is communicatively coupled to the first telemetry coil and the second end adapted to be communicatively coupled to a medical device programmer. Thus, coupling to the programmer is recited in claim 23 rather than coupling the implanted device as shown in Lee. Applicant respectfully requests reconsideration and allowance of claim 23.

Rejections Under 35 U.S.C. § 103

Claims 1, 3-6 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Batina (U.S. Pat. No. 4,700,707) in view of Silvian (U.S. Pat. No. 6,301,504).

For a combination of cited references to make out a *prima facie* case of obviousness the motivation to make the combination must be evidenced by something other than the description of the invention in Applicant's disclosure. Furthermore, the combination of the cited references must describe all of the elements of applicant's claimed invention.

Concerning the rejection to Claim 1:

Claim 1 has been amended to recite, among other things, a first and a second telemetry coil "concentrically planarly wound substantially in a common plane."

Applicant respectfully traverses the rejection because insofar as the rejection is applied to amended claim 1, the Office Action fails to make out a *prima facie* case of obviousness because the Office Action's cited portions of the combination of the patents do not describe all of the elements of the claimed invention. For example, Applicant cannot find in the proposed combination "a first and second telemetry coil concentrically planarly wound substantially in a common plane", as recited in amended claim 1.

Also, the Office Action fails to provide a motivation to combine the references as the Office Action proposes because the combination teaches away from the Applicant's disclosure. The proposed combination does not result in a telemetry coil that is concentrically planarly wound substantially in a common plane, as is recited in amended claim 1.

Applicant respectfully requests allowance of amended claim 1.

Concerning the rejection to Claims 3-6:

Applicant respectfully traverses the rejection. Claims 3-6 are dependent on claim 1 and provide further limitations to claim 1 and are allowable for the reasons, stated above, for claim 1.

Applicant further traverses the rejection concerning claims 3 and 4. The Office Action fails to make out a *prima facie* case of obviousness because the cited portions of the combination of the patents do not describe all of the elements of claims 3 and 4. Claim 3 has been amended to recite the first and the second telemetry coils including one or more loops of a conductive wire. The cited portions of the patents, combined as the Office Action proposes, do not teach or suggest this element as recited in amended claim 3. Also, the cited portions of the proposed combination do not teach or suggest where one or more loops of the conductive wire are concentrically wound in a common plane, as recited in claim 4.

Applicant respectfully requests reconsideration and allowance of claims 3 and 4.

Concerning the rejection to Claim 23:

Claim 23 has been amended to clarify the references to ferrite powder and to recite, among other things, a first telemetry coil and a second telemetry coil, where the first telemetry coil and the second telemetry coil are concentrically planarly wound substantially in a common plane.

Applicant respectfully traverses the rejection because insofar as the rejection is applied to amended claim 23, the Office Action fails to make out a *prima facie* case of obviousness because combination of the cited patents does not describe all of the elements in claim 1. For example, Applicant cannot find in the cited portions of the proposed combination, where the first telemetry

coil and the second telemetry coil are concentrically planarly wound substantially in a common plane, as recited in amended claim 23.

Applicant respectfully requests reconsideration and allowance of claim 23.

Claims 2, 8-11, 14, 25 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Batina (U.S. Pat. No. 4,700,707) and Silvian (U.S. Pat. No. 6,301,504) in view of Zarinetchi et al. (U.S. Pat. No. 6,389,318) (hereinafter "Zarinetchi").

To make out a *prima facie* case of obviousness, the motivation or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. Also, the cited references must describe all of the elements of applicant's claimed invention.

Applicant respectfully traverses the rejection because Applicant cannot find in the combination of the cited patents a motivation to combine them into the claimed invention. Batina describes a "telemetry system for receiving data from an implanted pacemaker at data rates exceeding 4k baud yet is free of carrier noise in the data recovered." See Batina column 1 lines 45 through 48. Silvian describes a high speed digital telemetry system for use in implantable devices. See Silvian column 1 lines 10 and 11. Zarinetchi describes an invention related to transcutaneous energy transfer (TET) devices and, more particularly, to an improved primary coil to such a device which reduces sensitivity to conductive objects in proximity of the TET. See Zarinetchi column 1 lines 23 through 26. Applicant cannot find a motivation to combine the high speed telemetry communication systems of Batina and Silvian with the shielded primary coil of the TET system in Zarinetchi and none has been suggested in the Office Action.

Applicant respectfully requests reconsideration and allowance of claims 2, 8-11, 14, 25 and 26.

Further concerning the rejection to Claims 2, 8-11, and 14:

Applicant further traverses the rejection because claims 2, 8-11, and 14 are dependent on claim 1 and provide further limitations to claim 1 and are allowable for the reasons, stated above, for claim 1.

Furthermore, Applicant traverses the rejection concerning claims 2 and 9-11. The Office Action fails to make out a *prima facie* case of obviousness because the combination of the cited patents do not describe all of the elements of claims 2 and 9-11.

First, claim 2 has been amended to recite a flexible housing, where the flexible housing encases the first and the second telemetry coils. Applicant cannot find in the cited portions of the combination of the patents this element as recited in amended claim 2. Second, Applicant cannot find in the proposed combination where the flexible housing is constructed of an insulating material, as recited in claim 9. Third, Applicant cannot find in the cited portions of the combination of the patents where the flexible housing is constructed of a material, which retains a formed shape, as recited in claim 10. And finally, Applicant cannot find in the proposed combination where the material is polyimide, as recited in claim 11.

Applicant respectfully requests reconsideration and allowance of claims 2, 8-11, and 14.

Further concerning the rejection to Claims 25 and 26:

Applicant traverses the rejection because claims 25 and 26 are dependent on claim 23 and provide further limitations to claim 1 and are allowable for the reasons, stated above, for claim 23.

Also, the cited portions of the combination of the patents do not describe all of the elements in claims 25 and 26. Claim 25 has been amended to recite, among other things, a flexible housing, where the flexible housing encases the first and the second telemetry coil. Applicant cannot find in the proposed combination a flexible housing, where the flexible housing encases the first and the second telemetry coil. Applicant respectfully requests reconsideration and allowance of claim 25.

Claims 7, 15 and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Batina (U.S. Pat. No. 4,700,707) in view of Silvian (U.S. Pat. No. 6,301,504).

Concerning the rejection of Claims 7 and 24:

Applicant respectfully traverses the rejection because claims 7 and 24 are dependent on claim 1 and 23 respectively, and provide further limitations to those claims. Applicant

respectfully submits that claims 7 and 24 are allowable for the reasons, stated above, for claims 1 and 23, and requests reconsideration and allowance of the claims.

Applicant further traverses the rejection because the cited portions of the combination of the patents do not describe where a predetermined outer dimension of the first and the second telemetry coils is a diameter in a range of fifteen (15) to forty-six (46) centimeters. Also, Applicant cannot find in Batina where the first telemetry coil is sized such that wireless communications with the implantable device are enabled, read that, in appropriate applications, the first telemetry coil is in the range of fifteen to forty-six centimeters, as is stated in the Office Action. It appears that the Examiner is using personal knowledge, so the Examiner is respectfully requested to submit an affidavit as required by 37 C.F.R. § 1.104(d)(2). Applicant respectfully requests reconsideration and allowance of claim 7.

Concerning the rejection of Claim 15:

Applicant respectfully traverses the rejection of claim 15 because the cited portions of the combination of the patents do not describe all of the elements of claim 15. For example, Applicant is unable to find in the cited portions of the proposed combination “where the one or more loops of a conductive wire wound substantially in a common plane and concentrically around a common core”, or “where the loops are positioned around a common core to form a substantially common gap between adjacent loops”, as recited in claim 15.

The Office Action rejected claim 15 in the alternative on the grounds that since the Applicant has not disclosed that the fifteen to forty-six centimeter diameter provides any criticality and/or unexpected results, it would have been obvious to one having ordinary skill in the art to modify the modified telemetry system taught in Batina with the first telemetry coil having a diameter of fifteen to forty-six centimeters to provide a communication linked size appropriately to the application so the telemetry communications can be optimized for a high quality transmission in a minimum amount of time.

Applicant respectfully traverses the rejection. Page 7 lines 10 through 20, and page 8 lines 23 to 28 of the application describe the advantages of increasing the flux aperture area by increasing the diameter of a coil to the diameter range of fifteen to forty-six centimeters. For example, one advantage is to allow the apparatus to communicate with an implanted device even

when it is placed fifteen centimeters away from the implanted device. Another advantage is to make the coil thin enough to maintain patient comfort. In contrast, Applicant cannot find in the cited portion of Batina a discussion of sizing a coil to improve telemetry distance. Applicant respectfully submits that sizing the coil to improve the telemetry distance while maintaining patient comfort is not obvious and requests reconsideration and allowance of claim 15.

Claims 12, 13 and 27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Batina (U.S. Pat. No. 4,700,707) and Silvian (U.S. Pat. No. 6,301,504) in view of Lee et al. (U.S. Pat. No. 5,741,315).

Concerning the rejection of Claims 12 and 27:

Claim 1 was amended to incorporate the subject matter of claim 12, and claim 23 was amended to incorporate the subject matter of claim 27. Consequently, claims 12 and 27 are cancelled and the rejection is moot.

Concerning the rejection of Claim 13:

Applicant respectfully traverses the rejection because claim 13 is a dependent claim that provides a further limitation to claims 1, and is allowable for the reasons, stated above, for claim 1.

Also, the Office Action failed to make out a *prima facie* case of obviousness because the combination of the cited patents fail to describe the element of claim 13. Applicant is unable to find in the cited portions of the proposed combination a flexible housing, where the first telemetry coil and the second telemetry coil are concentrically positioned in a common plane within the flexible housing, as recited in claim 13.

Applicant respectfully requests reconsideration and allowance of claims 13.

New Claim 30:

Claim 30 has been added. The subject matter of claim 30 is found on page 12 lines 11 through 13 of the Detailed Description section of the patent application. Applicant submits that claim 30 does not incorporate new subject matter.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612-373-6970) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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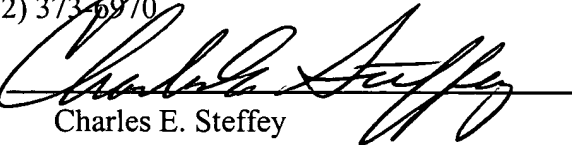
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Date

September 25, 2002

By



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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 26 day of September, 2002.

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CENE G HANSON

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